

REMARKS

Claims 1-3, 5-6, 8-9, 12, 15-18, 20-21, 23-24, 27, 30-31, 34-37, 39-41 and 43-52 are pending in the present application. Claims 1-3, 5-6, 8-9, 12, 15, 37, 39-41 and 43-52 are withdrawn and claims 16-18, 20-21, 23-24, 27, 30-31 and 34-36 are elected herein with traverse. Claims 1 and 30 have been amended to correct a readily apparent typographical error (claim 30) and place the claims in better form (claim 1). No new matter has been added with the amendments. Entry and consideration thereof are respectfully requested.

Restriction Requirement

The Examiner has required restriction between Groups (I)-(V) as set forth on pages 2-3 of the Office Action. Specifically, the Examiner has restricted the claims into the following groups.

Group I – claims 1-3, 5-6, 8-9, 12, and 15 drawn to a process for the preparation of solid polyester granules by suspension polymerization in the presence of diacyl peroxides and aromatic amines;

Group II – claims 16-18, 20-21, 23-24, 27, 30-31 and 34-36, drawn to a process for the preparation of solid polyester granules, which comprises preparing a solution of unsaturated polyester and a combination of peroxides comprising diacyl and dialkyl peroxides;

Group III – claim 37, drawn to a process for the preparation of solid polyester granules, comprising the step of preparing a solution of unsaturated polyester and a combination of diacyl peroxides in styrene, wherein the radical flux generated by a first peroxide is greater than any radical flux generated by a second peroxide;

Group IV - claims 39-41 and 43, drawn to a water-based decorative paint; and

Group V – claims 44-52, drawn to a redox initiating system for use in a process for the preparation of solid polyester granules, comprising a combination of diacyl peroxides and amine.

Applicants elect with traverse, Group II, claims 16-18, 20-21, 23-24, 27, 30-31 and 34-36. The requirement is traversed for the following reasons.

The Examiner bases the Restriction Requirement on the position that the redox initiating system feature of the claims does not make a contribution over the prior art in view of Ritchie et al. US '967 when combined with Kamath et al. US '703. However, the Examiner's

interpretation of the reference teachings and the conclusions based thereon are incorrect. As is described throughout the present application (see e.g. page 5 lines 6-11 of the specification), the Applicants have surprisingly found that a highly efficient redox initiating system for the manufacture of solid polyester granules can be formed by providing a combination of specific diacyl peroxides in a particular mole ratio with an amine of general formula (I). In particular, the diacyl peroxides comprise diaroyl peroxide and dialkanoyl peroxide having a diaroyl peroxide to dialkanoyl peroxide mole ratio that is equal to or greater than 1:1. (See independent claims 1, 16, 37, and 44.) Through use of the initiating system of the invention, polyester granules can surprisingly and advantageously be prepared by suspension polymerization, such that the resultant granule slurry has a residual free styrene level as low as less than 100 ppm.

Ritchie US '967 discloses an initiating system for the manufacture of solid polyester granules. The reference discloses an initiating system comprising an aromatic amine and a diacyl peroxide. However, Ritchie US '967 fails to disclose or make any suggestion whatsoever that the polyester granules should be prepared using an initiating system comprising a combination of diaroyl and dialkanoyl peroxides, let alone that the diaroyl and dialkanoyl peroxides be present in the specifically recited mole ratio of the claims that is equal to or greater than 1:1. This omission of Ritchie US '967 is acknowledged by the Examiner.

Kamath et al. US '703 relates in general to initiators for use in the polymerization of vinyl monomers. Kamath et al. US '703 specifically teaches polymerizing vinyl monomers using at least 2 free-radical initiators, one of which is of general formula (I), and the other of which may be one or more free-radical generating compounds, which are well known in the art, such as azo and peroxide initiators.

One of ordinary skill in the art would immediately recognize that the initiator of general formula (I) described in Kamath et al. US '703 is not a dialkanoyl or diaroyl peroxide. Furthermore, there is no disclosure or suggestion whatsoever in Kamath et al. US '703 that a combination of dialkanoyl and diaroyl peroxides should be used, let alone that they should be used in a mole ratio that is equal to or greater than 1:1. As such, in addition to there being no basis to combine Kamath et al. US '703 with Ritchie et al. US '967, even if so combined the instantly claimed invention would not be achieved.

The Examiner contends it would be obvious to use more than one peroxide in the process

disclosed in Ritchie et al. US '967, as it is taught in Kamath et al. US '703, and consequently arrive at the invention claimed in the present application. However, Kamath et al. US '703 merely teaches to use a combination of free radical initiators, one of which must be of general formula (I), and at least one other free radical initiator that may or may not be a peroxide. Given that the free radical initiator of general formula (I) of the reference is neither a diaroyl or dialkanoyl peroxide, and that the other initiators proposed in Kamath et al. US '703 for use in combination with the formula (I) initiator could be an azo compound, it one skilled in the art would, if anything be lead away from the instant invention by consideration of the teachings of Kamath et al. US '703.

The disclosure of Kamath et al. US '703 (alone or in combination with Ritchie et al. US '967) simply does not provide any basis or motivation whatsoever that would lead a person of ordinary skill in the art to the present invention as claimed. Accordingly, the redox initiating system defined in all claims of the present application is not obvious over Ritchie et al. US '967 when combined with Kamath et al. US '703. All of the claims therefore possess a common technical feature unifying the claims. As such, withdrawal of the restriction requirement and rejoinder of the claims is respectfully requested.

Election of Species Requirement

The Examiner has further required Election of Species between various Species identified on page 3-6 of the Office Action. Specifically, the Examiner requires an election of a single method for producing the polyester in a specific redox initiating system as defined by the specific peroxides and amines.

Applicants elect as specific species:

- 1) as a diaroyl peroxide – dibenzoyl peroxide;
- 2) as a dialkanoyl peroxide – dilauroyl peroxide; and
- 3) as an aromatic amine of formula (I) – N,N-bis(2-hydroxyethyl)-p-toluidine.

Claims 16-18, 21, 24, 27, 31, and 34-36 are generic to and read on the elected species. Claims 20, 23, and 30 are specific to and read on the elected species. Upon a finding of novelty and unobviousness of the elected species, the Examine is requested to expand the scope of the search to encompass a reasonable number of non-elected species.


Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact MaryAnne Armstrong, PhD, Registration No. 40,069, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

- ☒ Attached is a Petition for Extension of Time.
- ☒ Attached hereto is the fee transmittal listing the required fees.

If necessary, the Director is hereby authorized in this, concurrent, and future replies to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

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Respectfully submitted,

By 
MaryAnne Armstrong, PhD
Registration No.: 40069
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road, Suite 100 East
P.O. Box 747
Falls Church, VA 22040-0747
703-205-8000